

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A measuring instrument comprising:

a channel comprising a sample inlet opening and an exhaust opening,
the channel allows for moving a sample liquid containing a solid component from the
sample inlet opening toward the exhaust opening and for providing a liquid reaction field [[,
and]] ;

a first electrode and a second electrode which are used to apply voltage to the liquid
reaction field,

wherein a distance from the sample inlet opening to the first electrode is greater than a
distance from the sample inlet opening to the second electrode,

wherein the first electrode comprises an electron transfer interface for providing electrons
to the liquid reaction field or receiving electrons from the reaction field when voltage is applied
to the liquid reaction field via the first and second electrodes [[,]] ; the measuring instrument
comprising

a concentration means for increasing the concentration of the solid components
component in that a part in which solid component contacts the electron transfer interface in the
liquid reaction field [.] ; and

a water-absorbing layer positioned only downstream from the second electrode in a flow
direction of the sample liquid,

wherein the water-absorbing layer allows flow of the sample liquid from the sample inlet opening toward the second electrode but restricts flow of the sample liquid from the first electrode toward the exhaust opening.

2. (Currently amended) The measuring instrument according to Claim 1, wherein the concentration means comprises a water-absorbing layer containing contains an absorbent polymer material.
3. (Currently amended) The measuring instrument according to Claim 2, wherein the absorbent polymer material ~~comprises a~~ has water absorption power of 10 to 500 g/g.
4. (Currently amended) The measuring instrument according to Claim 2, further comprising a substrate on which are formed the first and the second electrodes are positioned, and a cover laid over this above the substrate.
5. (Original) The measuring instrument according to Claim 4, wherein the water-absorbing layer is formed as a film on at least that part of the cover which faces the electron transfer interface.
6. (Currently amended) The measuring instrument according to Claim 5, wherein the dimension of the water-absorbing layer ~~in the thickness direction of the substrate~~ without water absorption and with water absorption is has thicknesses of 1/30 to 1/10 and 1/5 to 3/5, respectively, of the dimension relative to a depth of the channel in the thickness direction.

7. (Canceled)

8. (Canceled)

9. (Currently amended) The measuring instrument according to Claim 4, wherein the water-absorbing layer ~~has a construction wherein~~ comprises a powder ~~comprising of~~ the absorbent polymer material ~~is supported on the cover.~~

10. (Currently amended) The measuring instrument according to Claim 9, wherein ~~the weight average grain size of the powder is~~ has a weight average grain size of 100 to 1000 μm without water absorption.

11. (Currently amended) The measuring instrument according to Claim 2, wherein the water-absorbing layer is provided downstream in ~~the direction of a flow~~ direction of the sample liquid from the electron transfer interface in the channel.

12. (Currently amended) The measuring instrument according to Claim 11, wherein ~~the dimension of the water-absorbing layer has a relative length in the direction of flow~~ direction of the sample liquid is ~~set at~~ 1/4 to 1/2 of ~~the a~~ distance from the sample inlet opening of the channel ~~inlet to the a~~ furthest downstream point of the electron transfer interface in ~~the direction~~ of flow direction of the sample fluid.

13. (Currently amended) The measuring instrument according to Claim 11, wherein the water-absorbing layer is formed so that ~~the thickness dimension of the part~~ a portion of the channel in which the water-absorbing layer ~~is formed~~ with water absorption is spaced from the cover by 0 to 15 μm ~~with water absorption~~.

14. (Currently amended) The measuring instrument according to Claim 4, wherein at least a portion of the water-absorbing layer has a part ~~formed in at least one of a location positioned either upstream from or downstream from and adjacent to the electron transfer interface and a location downstream from and while also being positioned~~ adjacent to the electron transfer interface.

15. (Currently amended) The measuring instrument according to Claim 14, wherein the water-absorbing layer ~~has comprises~~ a part ~~formed in a location positioned upstream from and adjacent to the electron transfer interface, and [[a]] another part formed in a location positioned downstream from and adjacent to the electron transfer interface.~~

16. (Original) The measuring instrument according to Claim 15, wherein the water-absorbing layer surrounds the electron transfer layer.

17. (Canceled)

18. (Canceled)

19. (Currently amended) The measuring instrument according to Claim 1, wherein the sample liquid is blood containing blood cells.

20. (New) A measuring instrument comprising:

a channel for moving a sample liquid containing a solid component and for providing a liquid reaction field, and
first and second electrodes which are used to apply voltage to the liquid reaction field,
wherein the first electrode comprises an electron transfer interface for providing electrons to the liquid reaction field or receiving electrons from the reaction field when voltage is applied to the liquid reaction field via the first and second electrodes, the measuring instrument comprising concentration means for increasing the concentration of the solid component in a part which contacts the electron transfer interface in the liquid reaction field;

wherein the concentration means comprises a water-absorbing layer containing an absorbent polymer material; and

wherein the absorbent polymer material has a water absorption power of 10 to 500 g/g.